ABSTRACT

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A super lightweight ceramic panel for a non-bearing wall utilizing an expandable clay mineral and a process for preparing the same are provided. The super lightweight ceramic panel is comprised of a clay composition containing 90 to 98% by weight of an expandable clay mineral, 1.5 to 5% by weight of a flux (glass), and 0.5 to 5% by weight of silicon carbide, and is prepared by mixing and pressing the clay composition, followed by firing at a temperature of 1100 to 1200°C. The super lightweight ceramic panel in accordance with the present invention is a material having a light weight and exhibiting improvement in physical properties such as water resistance, flame retardancy, heat insulation and rigidity, via formation of closed pores inside the ceramic material.